

## IN THE CLAIMS

1. (Currently Amended) A sensor for recording measuring values in a melt, said sensor can be inserted into a bore of the wall surrounding the cavity which receives the melt, ~~characterized in that~~ wherein the sensor is associated with at least one heating device.
2. (Currently Amended) The sensor according to claim 1, ~~characterized in that~~ wherein the sensor exhibits a heating device.
3. (Currently Amended) The sensor according to claim 2, ~~characterized in that~~ wherein at least the part of the sensor which extends into the melt as well as the part of the sensor which is surrounded by the bore can be heated.
4. (Currently Amended) The sensor according to ~~one of claims 1 to 3,~~ claim 1, wherein the heating device is designed to be in the area of the bore surrounding the sensor, preferably in a sleeve which receives the sensor and which can be inserted into the bore.
5. (Currently Amended) The sensor according to ~~one of claims 1 to 4,~~ claim 1, wherein at least one control unit is associated with the heating devices for adjusting the heat output.

6. (Currently Amended) The sensor according to ~~one of claims 1 to 5, characterized in that~~ claim 1, wherein the heating devices can be heated electrically, inductively or by means of fluids or gases which can be tempered.
7. (Currently Amended) The sensor according to claim 5, ~~characterized in that~~ wherein the sensor can be heated via a control unit for the purpose of being exchanged when the melt is solidified.
8. (Currently Amended) The sensor according to claim 5, ~~characterized in that~~ wherein the sensor can be kept at a temperature for the purpose of being exchanged when the melt is solidified.